

### 5.6.5 Managing Claims

Constructor claims are generally made for the purpose of requesting more financial remuneration or to deviate from the schedule. In the claim, the constructor alleges that the contracting party's action, inaction, or misrepresentation in the contract documents has caused an involuntary change in the cost or time of performing the contract. The contracting party can use the following techniques to minimize the occurrence and effects of claims:

- Before advertising for bids or offers, ensure that the drawings and specifications are biddable, all conflicting language has been removed, and ambiguities have been clarified.
- Make a complete investigation of the subsurface conditions before soliciting bids for and starting the RA and include the results in the bidding documents.
- Closely monitor the construction to anticipate problems and be prepared to resolve them as soon as possible.

Because EPA does not have privity of contract with the constructor for either USACE- or ARCS/RAC-managed RAs, EPA will become involved in constructor claims only under certain circumstances such as when the ARCS/RAC contractor pursues the claim in the name of the constructor (see FAR Part 33 and the Contract Disputes Act of 1978). If the ARCS/RAC contractor pursues a claim, it must be submitted to an EPA CO. Usually, however, the CM attempts to address any claim issues before the claim goes to the CO. If the CO denies the claim, it may be appealed in the Department of the Interior Board of Contract Appeals or in U.S. District Court.

For USACE-managed RAs, the constructor that directly contracts with USACE will submit a claim to USACE for consideration. USACE and the RPM should communicate so that the RPM is aware of any constructor claim that might affect the schedule or achievement of the remedy. If the USACE CO rejects the claim, it may be appealed in the Department of Defense Board of Contract Appeals or in U.S. District Court.

If a claim is filed, the CM or RE should address the issues raised and control future claim costs by having the technical and legal staff analyze each issue.

### 5.6.6 Value Engineering During Construction

Value engineering (VE) is to be included in federal construction contracts worth \$100,000 or more with few exceptions (see FAR 52.248-1). The VE clause for construction is an incentive clause that provides the opportunity to the constructor to use the latter's unique knowledge and construction experience as a basis for submitting a value engineering change proposal (VECP) (see FAR 52.248-3). Developed with its own resources (i.e., non-reimbursable), the VECP is the constructor's proposal to make changes to the RA project that, if incorporated, will save money without compromising quality or performance. The savings resulting from the incorporation of a VECP are normally shared (45-55 percent split for fixed-price contracts and a 75-25 percent split for cost-reimbursement contracts) between the federal government and the contractor that submits the VECP. However, this arrangement may vary according to contract type with the sharing arrangement being determined by the type of VE and the source of savings (see FAR 52.248-1(f)). Payment of any share due the constructor for use of a VECP shall be authorized by a modification to the construction contract.

After EPA receives a VECP from the contracting party, it must notify the contracting party as to the status of the VECP within 45 days or, if additional time is needed, explain the delay and provide an expected date for its decision. The RPM/Work Assignment Manager prepares a letter on the status of the VECP review for the CO's signature. VECPs should be processed expeditiously; however, EPA is not liable for any delay in acting upon a VECP.

If a VECP is not accepted, the CO notifies the contracting party in writing, which in turn notifies the constructor, explaining the reasons for rejection. Any VECP may be accepted, in whole or in part, by the CO's approval of a modification to the construction contract. The CO may accept the VECP, even though an agreement on price reduction has not been reached, by issuing a notice to proceed with the change. Until such a notice is issued or the CO approves a contract modification, the constructor must perform according to the existing contract.

For USACE-managed RAs, USACE follows its own VE procedures, but should notify the RPM of any

accepted VECs that would affect ROD requirements or the RA schedule or budget.

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*OSWER Directive 9355.5-03/FS, "Value Engineering," May 1990, provides additional information on VE during construction.*

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## 5.7 Contractor Completion Activities

As a project nears completion, all parties must understand their roles and responsibilities to ensure proper project completion and closeout. Final inspection and closeout activities are discussed below.

### 5.7.1 Achieving an Operational and Functional Remedy

Immediately following construction of the remedy, the remedy enters a "shakedown" phase referred to as the operational and functional period. This shakedown enables the constructor to make minor modifications as necessary to ensure the remedy is operating as designed.

Under 40 *CFR* Section 300.435, a remedy becomes operational and functional either one year after construction is complete or when the remedy is determined concurrently by EPA and the state to be functioning properly and is performing as designed, whichever occurs first.

The operational and functional determination by both EPA and the state is a critical milestone because it marks the start of the O&M phase of a project. Subsequently, disagreements may arise as to whether the remedy is operational and functional. To minimize disruption to the project, the RPM should do the following:

- Ensure the designer incorporates into the design documents (CQAP) the tests that are necessary to demonstrate that the remedy is operational and functional. This requirement should be included in the RD SOW.
- Obtain agreement with the state through the SSC on which tests will be used by both parties to demonstrate that the remedy is operational and functional.

### 5.7.2 Prefinal Construction Conference

A prefinal construction conference is required just before completing the construction work. The conference will be scheduled by the contracting party and attended by the RPM, state, and constructor. The objective of the conference is to discuss procedures and requirements for project completion and closeout. Suggested conference topics include:

- Final O&M plan submission
- Construction cleanup responsibilities
- Demobilization activities
- Security requirements for project transfer
- Prefinal inspection schedule
- EPA/state joint inspection schedule (*NCP* requirement)
- Facility startup and training
- Operator training

### 5.7.3 Prefinal and Final Inspections

The prefinal and final inspections are standard construction practices for closing out a contract. The purpose of these inspections is to determine whether the construction was completed in accordance with the contract. They are generally held between the contracting party and the constructor. These inspections are often confused with the mandatory EPA/state joint inspection requirement under the *NCP*, 40 *CFR* Section 300.515(g). The EPA/state joint inspection is a separate inspection held at the completion of physical construction to obtain agreement between EPA and the state that the operational and functional period is ready to commence. The contracting party and the constructor, however, may agree to invite both the RPM and the state to the prefinal or final inspection(s) to avoid having to schedule separate inspections.

#### Prefinal Inspection

The ARCS/RAC contractor's CM or USACE's RE and the constructor's construction superintendent will inspect the site and look at each element of work to see if it is complete and ready to be accepted. In some instances, the prefinal inspections can be performed as each major element of the job is completed instead of at the end of the project.

Generally, there will be a few elements of work still in progress at this time and some minor defects that will come to light as the inspection proceeds. A prefinal inspection report must be prepared that includes the punch list developed by the CM, completion dates for outstanding items, and a date for a final inspection (if one is to be held). A copy of this report should be sent to the RPM.

#### **Final Inspection**

Work is considered complete when the remedy is operational and functional, all punch list tasks have been performed, and terms of the contract have been met. Thus, completion of construction activities does not mean that the WA is complete. All parties should attend the final inspection. The CM or RE determines the level of work completeness. There may be a few minor work elements not yet complete, but they may not affect acceptance of the work. A portion of the constructor's final payment is retained until these outstanding elements are completed.

The RPM must focus EPA's portion of the inspection on determining whether the remedy has been implemented in full compliance with the ROD. In addition, where an ARCS/RAC contractor serves as the contracting party, the RPM needs to determine if the work has been completed as described in the ARCS/RACs work plan. The RPM should perform a thorough work plan review so he or she will be fully prepared to participate in the inspection. The RPM should have his or her TRT assist in this inspection.

#### **Demobilization**

Site demobilization occurs after the majority of construction work is completed. This phase of the remediation is generally comprised of the following tasks:

- Removing all equipment, machinery, or materials that are no longer necessary to complete site activities
- Removing temporary buildings and structures
- Completing all necessary restoration or replacement of public or private property affected by the remediation activities
- Removing site debris, disconnecting temporary utilities, and cleaning roadways or other public access or service areas

- Transferring all finalized documentation associated with the construction (e.g., log books, records, etc.)

Items removed from the site during demobilization may require decontamination before removal. Final inventories of remaining materials and utilities should also be completed. Any additional or site-specific requirements contained in contract requirements and specifications prepared during the RD should be addressed.

#### **5.7.4 Contractual Acceptance of the Project and Warranty**

Accepting the work is an important juncture in the project because it alters the rights and responsibilities of the parties involved in the construction project. The government takes over full possession of the facilities from the constructor upon acceptance of the work. Final acceptance occurs after final inspection and correction of the punch list items. The risk of loss due to damage or theft shifts from the constructor to the government. By accepting the work, the government limits its rights to require the constructor to make adjustments to or correct defects in the work.

The government's acceptance does not relieve the constructor from assuming responsibility for the quality of work performed. If any of the three exceptions to the finality of acceptance—latent defects, fraud, or gross mistakes—are found to exist, the constructor generally must correct the work.

In conditions not described above, a *warranty* clause must be in the original contract to ensure that the constructor corrects any defects. The warranty period is usually one year against defects in equipment and materials or quality of work and design.

#### **Final Payment**

Final payment to the constructor cannot occur until the following items are completed:

- All final drawings, log books, records, and other documentation are received by the contracting party.
- The contracting party receives a letter from the constructor stating that all work has been performed in accordance with the contract and is complete in every respect.

- The contracting party receives a letter from the constructor stating that all wages, debts, and payments incurred by the constructor during work performance have been settled or paid in full.
- The contracting party receives a letter from the bonding company stating that it has reviewed the constructor's final request for payment and agrees that payment will release the constructor from any and all claims that the constructor may have against the regulatory agency(ies) in performance of this contract.
- The contracting party receives satisfactory evidence of the release of any outstanding liens.

### 5.7.5 Remedial Action Report

Within 60 days after the final inspection, the contracting party prepares and submits an RA report to the RPM for each construction project. The report, the official record of RA activities, is a required submittal. This is not to be confused with the EPA contractor or USACE contractual obligations with the constructor. This is an EPA administrative requirement only and does not have to be done to fulfill contractual agreements. The RA report contains the following information:

- Introduction
- Chronology of events
- Performance standards and cleanup goals met
- Description of the QA/quality control (QC) procedures followed
- Description of construction activities
- Final inspection documentation
- Certification that the remedy is operational and functional
- Discussion of O&M requirements
- Summary of project costs

### Review of the RA Report

The RPM reviews the RA report to ensure that the remedy has been completed and meets EPA's goals as established in the ROD. After reviewing and accepting the report, the RPM prepares a letter to be

signed by an EPA branch chief, notifying the contracting party of the acceptance.

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*OSWER Directive 9355.0-39FS, "Remedial Action Report—Documentation for Operable Unit Completion," June 1992, provides more information on RA reports.*

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## 5.8 State Operation and Maintenance

This section provides a brief overview of O&M activities. State-performed O&M activities are necessary to protect the integrity of the remedy. (Additional guidance that EPA Headquarters is developing on O&M should be inserted into the handbook when available.)

O&M commences on the date that EPA and the state agree that the remedy is operational and functional. The exception is active ground water restoration, where EPA will operate a pump and treat system for up to ten years, after which time the system is declared operational and functional.

The SSC establishes the rules for transferring the site and its facilities from EPA to state control. Once the facility is transferred, it becomes state property. The RPM must ensure that the O&M package (drafted by the designer) has been completed by the constructor and includes all record drawings and manufacturer equipment manuals. The state and its contractors should conduct a tour of the site and obtain any special training necessary to carry out O&M before the transfer.

The RPM should be aware that site access is often overlooked as part of the transfer process. The RPM and state should determine what, if any, state site access is needed to implement O&M. These issues must be worked out before the state assumes control. O&M commences on the date in the RA report that certifies the project is complete and the remedy is operational and functional (with the exception of ground water restoration).

The SSC is also the mechanism through which EPA establishes the state's reporting requirements for O&M, including the frequency for report submission. The RPM must continue to review these reports and ensure that they are submitted on schedule after the state assumes responsibility for the site.

## 5.9 Site Closeout Process

The site closeout process consists of documenting that all Superfund response action is complete and the site can be deleted from the National Priorities List (NPL). Site completion requirements provide a definitive endpoint to Superfund cleanup activities and satisfy the NCP requirements for site deletion. **Figure 5-8** illustrates the site closeout process, highlighting the following three phases:

- Construction completion activities
- Site completion activities
- Site deletion activities

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*OERR/HSCD "Closeout Procedures for National Priorities List Sites," (Draft), April 1995, provides information on the site closeout process.*

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### 5.9.1 Construction Completion Activities

In 1991, the EPA Administrator established national targets for the number of sites to be deleted from the NPL through the year 2000. The concept of *construction completion*, EPA's primary measure of accomplishment toward that goal, was created to simplify the system of site categorization and to better communicate the successful completion of site cleanup activities. Construction completion means that physical construction of the remedy is complete or that no substantial physical construction is necessary to implement the remedy. It marks completion of a phase in the Superfund remedial process but does not affect the separate milestones of site completion or deletion. Characteristics of sites satisfying construction completion criteria include:

- Sites where all necessary physical construction is complete, whether or not final cleanup levels or other requirements have been achieved
- Sites where EPA has determined that the response action should be limited to measures not involving construction (e.g., institutional controls)
- Sites that qualify for deletion from the NPL

#### Preliminary Closeout Report (PCOR)

The PCOR forms the basis for the final closeout report (FCOR) and focuses on site construction and

completion. The PCOR includes information on the release of contaminants at the site, site conditions, response action, steps remaining for site completion, and a schedule for their completion. The PCOR should contain the information shown in **Figure 5-9**.

The RPM often prepares the PCOR before the RA report for the final operable unit (OU) because the RA report can be submitted up to 60 days after determining that the remedy is operational and functional. The PCOR generally should be three to five pages long. A draft of the PCOR must be sent to EPA Headquarters for review. The purpose of the review is to ensure national consistency in reporting completions. Construction completion is considered final when the Regional Division Director approves and signs the PCOR.

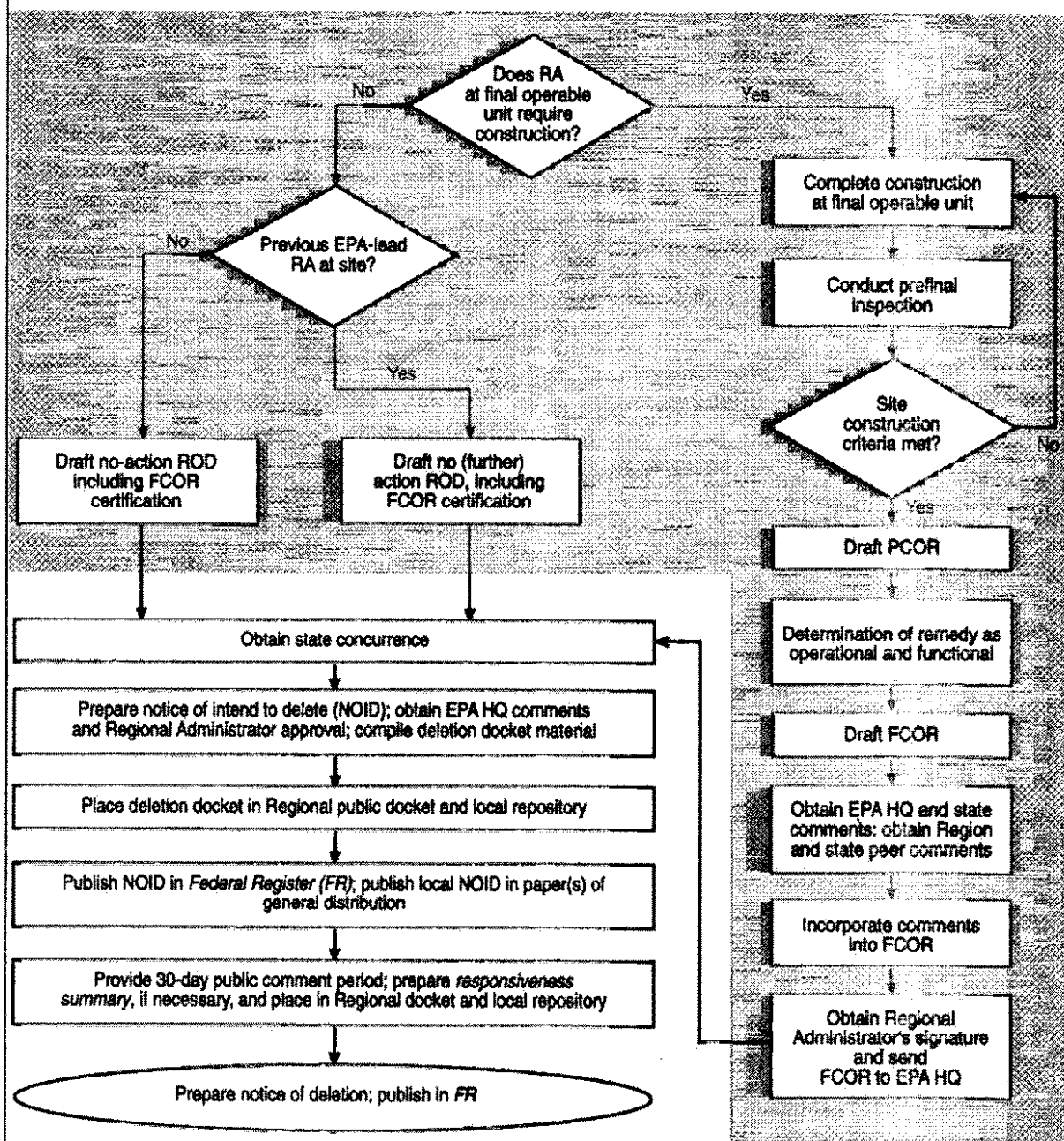
#### NPL Sites Involving Construction

Completion of physical construction means that the final remedy, as determined by the ROD, has been constructed at the site and a prefinal inspection has identified only minor unfinished activities on the punch list. When determining eligibility for construction completion, the RPM must anticipate likely site progress as well as consider current site status. A site with a significant number of outstanding work elements to be completed should not be categorized as achieving construction completion. Achieving construction completion does not imply final acceptance by EPA.

After a site achieves construction completion status, some minor tasks will remain before a site can move towards site completion status (i.e., completing remaining punch list items, conducting the final inspection, achieving operational and functional status, and signing the final RA report). In most cases, the RPM should prepare a PCOR to document construction completion. However, sometimes the need for a PCOR is eliminated because remedial activities at the site have progressed to the point where construction and site-completion determinations occur simultaneously. In these cases, the RPM can rely on the FCOR to satisfy the documentation requirements for both events. Additional information on preparing an FCOR is presented later in this section.

Figure 5-8

## Site Completion and Deletion Process



NOTE: Shaded portion identifies the steps associated with achieving construction and site completion.

Figure 5-9

**Contents of the Preliminary Closeout Report**

- Background of site conditions
- Remedial construction activities
- Discussion of QA/QC from cleanup activities
- Final inspection
- RA report and EPA approval
- EPA/state joint inspection (may coincide with the final inspection)
- Operational and functional periods
- O&M period
- Discussion of five-year reviews

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**NPL Sites Not Involving Construction**

At some NPL sites, EPA determines through the remedial investigation/feasibility study (RI/FS) that no remedial construction is necessary to protect human health and the environment. If certain criteria are met, construction and site completion can be documented by completing one of the following:

- no-action ROD
- no-further-action ROD
- limited-action ROD requiring no physical construction (i.e., a ROD with only institutional controls)

A site with a ROD that does not require construction is considered to be a construction and site completion site when the Regional Administrator approves and signs the ROD. If the site is a no-action site where EPA has never implemented an RA, the RPM does not prepare a PCOR (or FCOR) and should instead place the following certification in the declaration section of the no-action ROD:

"EPA has determined that its response at this site is completed and no action/no further action is necessary at this site. Therefore, the site now qualifies for inclusion on the construction completion list."

For sites with no-further-action RODs where EPA has previously conducted RAs (triggering statutory documentation requirements), the RPM may choose either to prepare an FCOR or to document compliance with statutory requirements in the RODs,

incorporating information normally included in the FCOR and the certification mentioned above.

Sites with limited-action RODs not requiring physical construction may achieve construction completion when the Regional Administrator approves and signs the ROD. The RPM does not prepare a PCOR, but should instead place the following certification in the declaration section of the limited-action ROD:

"EPA has determined that its future response at this site does not require physical construction. Therefore, the site now qualifies for inclusion on the construction completion list."

The RPM may not declare site completion at this time since the site will include some future activities such as implementing the institutional control requirements. An FCOR will thus be required (see section 5.9.2).

**5.9.2 Site Completion Activities**

Site completion marks the end of remedial activity at a site. A site must meet *all four* criteria below to be eligible for site completion status:

- Cleanup levels specified in all RODs are met and cleanup actions and other measures identified in all RODs are successfully implemented.
- The constructed remedy is operational, functional, and performing according to engineering design specifications.
- The site protects human health and the environment.
- The only remaining site activity to be completed, if any, is O&M.

A site may meet the site completion criteria following any one of a number of activities at a site. For example, a site is eligible for site completion following completion of the final OU of the RA, a no-action ROD, or completion of a long-term response action. In order to satisfy these requirements, an FCOR generally will be prepared. However, in certain cases a final OU limited-action ROD for a site that does not require remedial construction may be sufficient documentation to satisfy site completion requirements (see section 5.9.1).



### The FCOR

The FCOR is a detailed summary of site history, emphasizing the RD and RA. In general, the RPM prepares the FCOR but also may allow other parties to prepare it. The FCOR is usually 12 to 15 pages long and should summarize the information necessary to describe the activities performed and the results achieved. Figure 5-10 lists the types of information in an FCOR.

The information needed to prepare the FCOR should be readily available from previous documentation of site activities such as the RA report, RI/FS, and ROD.

Since it is the final record of site remedial activities, the FCOR must be complete and able to stand alone. The FCOR provides the overall technical justification for site completion, and so must clearly demonstrate how the remedial activities conducted satisfy site completion requirements. After the FCOR is prepared, the RPM submits a draft to EPA for review. The state also must be given the opportunity to review the FCOR and provide comment. However, the state does not formally offer a signed concurrence on the report itself. Site completion is considered final when the Regional Administrator approves and signs the FCOR.

Figure 5-10

Final Closeout Report Summary	
Chapter	Contents
I. Introduction	- General statement indicating successful execution of RA
II. Summary of Site Conditions	- Site background - Early actions performed - RI/FS results - ROD findings - Design criteria - Cleanup activities performed - Community involvement activities performed
III. QA/QC of Cleanup Activity	- QA/QC protocol followed - Sampling and analysis protocol followed - Results of on-site inspections
IV. Monitoring Results	- Sufficient data available to demonstrate cleanup levels specified in the ROD or action memoranda have been achieved and implemented and remedies are performing to design specifications - Brief documentation of monitoring required at no-action sites after the ROD is signed (should also be included in the administrative record)
V. Summary of O&M Activity	- Assurance that O&M plans are in place and sufficient to maintain integrity of remedy - Assurance that all necessary institutional controls are in place - Assurance that O&M activities specified for the site will be performed by the state or PRP(s)
VI. Protectiveness	- Assurance that the implemented remedy (or no-action decision) achieves the degree of cleanup or protection specified in the ROD(s) for all pathways of exposure and that no further Superfund response is needed to protect human health and the environment - Assurance that all areas of concern described in the NPL listing have been adequately addressed
VII. Five-Year Review	- Statement explaining whether a five-year review is appropriate, and if so, the type of review (statutory or policy) and review schedule - Brief description of the results of any five-year reviews performed - Assurance that the remedy is protective
VIII. Bibliography	- Complete citations of all relevant reports

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### 5.9.3 Site Deletion Activities

The site is eligible for deletion from the NPL when all of the site completion activities discussed in section 5.9.2 are complete. At this point, issues surrounding placement of the site on the NPL have been addressed, the threat to human health and the environment has been addressed, and the Superfund process has completed its course. Site deletion requirements ensure that documentation and verification of activities and decision-making at the site are complete and the public has an opportunity to comment before the site is formally deleted from the NPL.

Section 300.425(e) of the *NCP* states that a site may be deleted from or recategorized on the NPL when no response/no further response is appropriate. The RPM consults with the state in making this determination. To delete a site from the NPL, EPA must determine, and the state must concur, that *one* of the following criteria has been met:

- Potentially responsible parties (PRPs) or other persons have implemented all required response actions.
- All appropriate Fund-financed response under CERCLA has been implemented, and no further response action by PRPs is appropriate.
- The RI has shown that the release poses no significant threat to public health or the environment, and therefore, taking of remedial measures is not appropriate.

Deletion of a site from the NPL does not preclude eligibility for subsequent Fund-financed or PRP actions. If future actions warrant, the *NCP* provides that Fund-financed RAs may be performed at sites deleted from the NPL. When there is a significant release at a site deleted from the NPL, the site may be restored to the NPL after rescoring the site on the Hazard Ranking System. Additionally, enforcement actions also may be taken, depending on liability releases in the consent decree or administrative order.

The RPM should initiate the deletion process by consulting with the state and requesting its concurrence with EPA's intent to delete the site from the NPL. *No site may be deleted from the NPL without state concurrence.* Once state concurrence is obtained, the RPM prepares a deletion docket containing all pertinent information supporting the deletion recommendation. The RPM works with the Superfund community involvement staff to ensure that complete copies of the docket are placed in the appropriate Regional and local repositories.

#### Notice of Intent to Delete (NOID)

The NOID informs the public of EPA's intention to delete a site from the NPL. The deletion docket must be complete before the Region publishes the NOID in the *Federal Register (FR)* or local newspaper(s). Site-specific information needed to prepare the NOID should be available from the FCOR. **Figure 5-11** lists the contents of a NOID.

The public has the opportunity to comment on the intended NPL deletion during the 30-day comment period that follows publication of the NOID. The RPM is responsible for preparing a *responsiveness summary* for all local and national comments received. The responsiveness summary should present all comments received during the public comment period, paired with detailed responses to the comments. The RPM must include a copy of the responsiveness summary, approved by the Regional Administrator, in the Regional docket and local repository.

#### Notice of Deletion

The RPM then publishes the notice of deletion in the *FR*. This notice states that all appropriate Fund-financed responses under CERCLA have been implemented and that no further response is appropriate. The notice of deletion includes an effective date, a Regional contact, and supplemental site information. All NPL rulemakings subsequent to the publication of this notice will reflect this deletion.

Figure 5-11

### Contents of the Notice of Intent to Delete

<i>Chapter</i>	<i>Contents</i>
I. Summary	Announcement of intent to delete
II. Dates	Dates of a 30-day period for submission of public comments
III. Addresses	Name, address, and phone number of a Regional contact to whom comments should be sent; address of Regional docket and local repository
IV. Regional Contact Information	Name, address, and phone number of a Regional contact for further information or questions
V. Supplementary Information	<p>Information: identification of site(s) to be deleted and a summary of information in the NOID</p> <p><b>NPL Deletion Criteria:</b> List of the applicable NCP criteria and statement indicating that EPA retains the ability to use Superfund authority at a deleted site if future conditions warrant such action (40 CFR §300.425(e)(3))</p> <p><b>Deletion Procedures:</b> brief description of procedures followed to delete sites from the NPL</p> <p><b>Bases for Intended Site Deletion(s):</b> brief descriptions of the following items:</p> <ul style="list-style-type: none"> <li>- Site history (location, former use, type of contaminants, FR citations of proposed and final NPL listing, and site conditions resulting in listing)</li> <li>- All response actions taken, including scope of RI (if applicable), general results, and conclusions regarding future performance of these actions</li> <li>- Specific cleanup standards and criteria and results of all confirmatory sampling</li> <li>- O&amp;M procedures and site monitoring program</li> <li>- Reasons for needing five-year reviews, when appropriate, and plans for their execution, in accordance with EPA's plans for their execution, in accordance with EPA's requirements for protectiveness at the time of each future review</li> <li>- Major community involvement activities</li> <li>- How site meets deletion criteria</li> <li>- Evidence of state concurrence with decision to delete site</li> </ul>

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